



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/719,736

11/21/2003

Steven R. Sedlmayr

AUO1016

3544

7590

06/27/2006

Law Office of Roxana H. Yang  
P.O. Box 3986  
Los Altos, CA 94024

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/719,736

Applicant(s)

SEDLMAYR, STEVEN R.

Examiner

Joshua L. Pritchett

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 157 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 157 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to Request for Continued Examination filed May 8, 2006 and Amendment filed February 27, 2006. Claim 157 has been amended as requested by the applicant.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 157 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa (US 5,200,843) in view of Konno (US 4,497,015) and Dudley (US 4,159,163).

Karasawa et al. disclose in fig. 13 a method of producing a modulated beam of visible light (from 49), comprising: (a) producing a beam of electromagnetic energy from a light source (from 1); (b) separating the beam of electromagnetic energy into a plurality separate electromagnetic energy beams (by 45) without previously discarding half of the beam of electromagnetic energy (the beam consists only of a single polarization, therefore nothing is discarded when it is being separated by 45), each of the electromagnetic energy beams having a

Art Unit: 2872

predetermined orientation of electromagnetic wave field vector (P or S) elimination of an element and its function is within the skill of one of ordinary skill in the art one would have been motivated to remove polarizer (44) to increase the brightness of the image displayed on the screen (13); (c) passing a plurality of portions of each separated electromagnetic energy beam through a respective one of a plurality of means (8R, 8G, 8B) for changing the orientation of the electromagnetic wave field vector in a single direction (fig. 13) hereby the orientation of electromagnetic wave field vector of the plurality of portions of the electromagnetic energy beams is altered as same passes through the respective one of the plurality of means for changing the orientation of electromagnetic wave field vector (column 1, lines 31-33)., (d) combining (with 47) the more than two separated electromagnetic energy beams without previously subcombining any plurality of the separated electromagnetic energy beams; (e) locating a projection means (49) such that the distance of the light path between the projection means and each of the plurality of means (8K 8G, 8B) for changing the orientation of the electromagnetic wave field vector is substantially equal (fig. 13); (f) passing at least a portion of the single collinear beam of electromagnetic beams of electromagnetic energy to the projection means (49); (g) locating a surface means (13); and (h) passing at least a portion of the single collinear beam of electromagnetic energy from the projection means to the surface means (fig. 13). Karasawa et al. disclose the claimed invention except for the beam having substantially uniform flux intensity substantially across the entire beam and the surface means being up to approximately 10 feet of the projection means. Konno et al. disclose a light illumination device (fig. 5) that produces a beam (at M) that has substantially uniform flux intensity substantially across the beam of light (column 5, lines 43-52). It would have been obvious to one of ordinary

Art Unit: 2872

skill in the art at the time the invention was made to replace the light source of Karasawa et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image. Further, it is very well known that there are projectors, which are portable for use in rooms and offices up to a distance of approximately 10 feet from the projection means. For example, Dudley teaches in column 2, lines 31-32 that a common projection-to-screen distance is 10 feet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the surface means be up to approximately 10 feet from the projection means in order to provide projection capability based on the size of the room. Finally, it is noted that the preamble fails to structurally limit the body of claim. Karasawa et al. in view of Konno et al. meets all of the structural limitations required by the claim in support thereof. As such, Karasawa et al. in view of Konno et al. must support the brightness of the image increasing as the distance from the projector lens to a screen increases up to a distance of approximately 10 feet in the same way as the structure of the claim.

### *Response to Arguments*

Applicant's arguments filed February 27, 2006 have been fully considered but they are not persuasive.

Applicant argues the polarizer (44) of Karasawa will absorb half the light from the light source. It has been held that it is within the skill of one of ordinary skill in the art to remove an element and its function. The removal of the polarizer (44) would destroy the Karasawa reference because the splitter (45) would still function to split the light beam in the same manner

Art Unit: 2872

and the mirrors would function the same regardless of the polarization of the light. Therefore the initially polarization of the light from the light source is not critical to the functionality of the apparatus shown in Fig. 13 of Karasawa.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

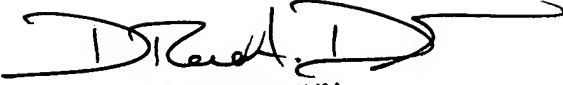
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joshua L Pritchett  
Examiner  
Art Unit 2872

Application/Control Number: 10/719,736  
Art Unit: 2872

Page 6

JLP 

  
**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**